Electrolux

Product Information and Technical Guide

2004/5 Room Air Conditioners
Model Description Year “N”
Example:

FAS256N2A
FAH105N1T
FAK083N7V

Factory Location: EK

ATTENTION SERVICERS!

To get a helping hand, visit the Frigidaire Web Site at:
http://www.frigidaire.com
User name: service
Password: tips

Table of Contents	2
Safe Servicing Practices	3
Important Safety Update	4
Model Specification	5-10
Compressor Overloads	11
Receptacle Codes	12
Product Dimensions	13
Thermostat Diagrams	14
Fan/Blower Diagrams	15-16
Wiring diagrams	17-18
Troubleshooting	19-21

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TABLE OF CONTENTS

Safe Servicing Practices.....3
Important Safety Update.....4
Model Specifications.....5-10
Compressor Overload Data.....11
Receptacle Outlet Codes.....12
Product Dimensions.....13
Control Thermostat Location Diagrams.....14
2004 Heavy Duty Thermostat Locations.....14
2004 Builder Thermostat Locations.....14
2004 Slider Thermostat Locations.....14
Fan and Blower Location Diagrams.....15-16
TTW.....15
Slider Casement.....15
Motor.....15
Heavy Duty Top Control.....16
Wiring Diagrams.....17-18
A232012.....17
309201101/03.....17
309201102/03.....18
309902101/02.....18
Troubleshooting.....19-21

SAFE SERVICING PRACTICES - ALL APPLIANCES

To avoid personal injury or property damage, it is important that **Safe Servicing Practices** be observed. The following are some limited examples of safe practices.

1. **DO NOT** attempt a product repair if you doubt your ability to complete it in a safe and satisfactory manner.

2. Before servicing or moving an appliance
   - Remove power cord from electrical outlet, trip circuit breaker to **OFF** position, or remove fuse
   - Turn off gas supply
   - Turn off water supply

3. Never interfere with the proper operation of any safety device.

4. **Use only OEM replacement parts cataloged for this appliance. Substitutions may defeat compliance with safety standards set for home appliances.**

5. **GROUNDING**: The standard color coding for safety ground wires is **GREEN**, or **GREEN** with **YELLOW STRIPES**. **DO NOT** use ground leads as current carrying conductors. It is **EXTREMELY** important that the service technician reestablish all safety grounds prior to completing service. Failure to do so will create an electrical hazard.

6. Prior to returning the product to service, ensure that
   - All electrical connections are correct and secure
   - All electrical leads are properly dressed and secured away from sharp edges, high-temperature components, and moving parts
   - All non-insulated electrical terminals, connectors, heaters, etc. are adequately spaced away from all metal parts and panels
   - All safety grounds (both internal and external) are correctly and securely connected
   - All panels are properly and securely reassembled

WARNING

This service manual is intended for use by persons having electrical and mechanical training and a level of knowledge of these subjects generally considered acceptable in the appliance repair trade. Electrolux Home Products Inc. cannot be responsible, nor assume any liability, for injury or damage of any kind arising from the use of this manual.

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IMPORTANT SAFETY UPDATE

Room Air Conditioners manufactured after August 1st, 2004 are equipped with a new industry regulated power cord with either of the following in the plug-head or in line:

LCDI: Leakage Current Detection Interrupter
AFCI: Arc-Fault Circuit Interrupter.

All Frigidaire products have an LCDI located in the plug head or in-line.

The power supply cord contains a current device that senses damage to the power cord. To test your power supply cord does the following:

1. Plug in the Air Conditioner.
2. The power supply cord will have TWO buttons on the plug head. Press the TEST button. You will notice a click as the RESET button pops out.
3. Press the RESET button. Again you will notice a click as the button engages.
4. The power supply cord is now supplying electricity to the unit. (On some products this is also indicated by a light on the plug head).

Notes:

- Do not use this device to turn the unit on or off.
- Always make sure the RESET button is pushed in for correct operation.
- The power supply cord must be replaced if it fails to reset when either the TEST button is pushed, or it cannot be reset. A new one can be obtained from the product manufacturer.
- If power supply cord is damaged, it CANNOT be repaired, it MUST be replaced by one obtained from the product manufacturer.

FRIGIDAIRE MODEL SPECIFICATIONS

Model	FAS156N1A	FAS156N1A2	FAS184N2A	FAS184N2A2	FAS185N2A
Chassis Type	Heavy Duty	Heavy Duty	Heavy Duty	Heavy Duty	Heavy Duty
Capacity Features					
BTU-Cooling	15100	15100	18000/17800	18000/17800	18500/18200
BTU-Heating	-	-	-	-	-
Moisture Removal	3.5	3.5	5.3	5.3	5.5
EER	10.7	10.7	9.7	9.7	10.7
Electrical Information					
Voltage	115	115	230/208	230/208	230/208
Amps-Cooling	12.5	12.5	8.5/9.0	8.5/9.0	7.8/8.5
Amps-Heating	-	-	-	-	-
Watts-Cooling	1415	1415	1860/1840	1860/1840	1730/1700
Watts-Heating	-	-	-	-	-
Fuse/Breaker(Amps)	15	15	15	15	15
Receptacle Type	NEMA 5-15	NEMA 5-15	NEMA 6-15	NEMA 6-15	NEMA 6-15
Power Cord Number	309343111	309343133	309343112	309343134	309343112
Power Cord Awg Min	14	14	16	16	16
Wiring Diagram	309902101	309902101	309902101	309902101	309902101
Page #	18	18	18	18	18
Air Flow System					
Capacitor-µ farads	10/370	10/370	6/440	6/440	6/450
Fan Motor Mfg.	Heshan	Heshan	Heshan	Heshan	Heshan
Fan Motor Number	309630615	309630615	309630613	309630613	309630613
RPM/CMP(EVAP)					
High	980/530	980/530	975/500	975/500	1000/480
Medium	-	-	-	-	-
Low	810/400	810/400	775/400	775/400	800/380
Heat Only	-	-	-	-	-
Refrigeration System					
Compressor Mfg.	LG	LG	LG	LG	LG
Compressor Number	QK191CAB	QK191CAB	QJ258KAB	QJ258KAB	QJ250KBA
Compressor Type	Rotary	Rotary	Rotary	Rotary	Rotary
Overload Protector	A363784	A363784	A363771	A363771	A363789
Capacitor-µ farads	60/370	60/370	25/440	25/440	35/450
Refrigeration Charge	42	42	31.75	31.75	36
Restrictor Tube	A112129	A112129	A112138	A112138	A112115
Thermostat Type	Electronic	Electronic	Electronic	Electronic	Electronic
Installation Instructions					
Kit Type	A	A	A	A	A
Part Number	309000906	309000906	309000906	309000906	309000906
Control Thermostat Location Diagram	Page 14	Page 14	Page 14	Page 14	Page 14
Condenser Fan and Evaporator Blower Location Diagram	Page 16	Page 16	Page 16	Page 16	Page 16

FRIGIDAIRE MODEL SPECIFICATIONS

Model	FAS185N2A2	FAS186N2A	FAS186N2A2	FAS226N2A	FAS226N2A2
Chassis Type	Heavy Duty	Heavy Duty	Heavy Duty	Heavy Duty	Heavy Duty
Capacity Features					
BTU-Cooling	18500/18200	18500/18200	18500/18200	22000/21600	22000/21600
BTU-Heating	-	-	-	-	-
Moisture Removal	5.5	5.5	5.5	6.5	6.5
EER	10.7	10.7	10.7	9.4	9.4
Electrical Information					
Voltage	230/208	230/208	230/208	230/208	230/208
Amps-Cooling	7.8/8.5	7.8/8.5	7.8/8.5	10.5/11.4	10.5/11.4
Amps-Heating	-	-	-	-	-
Watts-Cooling	1730/1700	1730/1700	1730/1700	2340/2300	2340/2300
Watts-Heating	-	-	-	-	-
Fuse/Breaker(Amps)	15	15	15	15	15
Receptacle Type	NEMA 6-15	NEMA 6-15	NEMA 6-15	NEMA 6-15	NEMA 6-15
Power Cord Number	309343134	309343112	309343134	309343124	309343134
Power Cord Awg Min	16	16	16	14	14
Wiring Diagram	309902101	309902101	309902101	309902101	309902101
Page #	18	18	18	18	18
Air Flow System					
Capacitor-µ farads	6/450	6/450	6/450	7.5/450	7.5/450
Fan Motor Mfg.	Heshan	Heshan	Heshan	Heshan	Heshan
Fan Motor Number	309630613	309630613	309630613	309630614	309630614
RPM/CMP(EVAP)	-	-	-	-	-
High	1000/480	1000/480	1000/480	1115/550	1115/550
Medium	-	-	-	-	-
Low	800/380	800/380	800/380	925/470	925/470
Heat Only	-	-	-	-	-
Refrigeration System					
Compressor Mfg.	LG	LG	LG	LG	LG
Compressor Number	QJ250KBA	QJ250KBA	QJ250KBA	QP306KBA	QP306KBA
Compressor Type	Rotary	Rotary	Rotary	Rotary	Rotary
Overload Protector	A363789	A363789	A363789	Internal	Internal
Capacitor-µ farads	35/450	35/450	35/450	40/450	40/450
Refrigeration Charge	36	36	36	38.5	38.5
Restrictor Tube	A112115	A112115	A112115	A112114	A112114
Thermostat Type	Electronic	Electronic	Electronic	Electronic	Electronic
Installation Instructions					
Kit Type	A	A	A	A	A
Part Number	309000906	309000906	309000906	309000906	309000906
Control Thermostat Location Diagram	Page 14	Page 14	Page 14	Page 14	Page 14
Condenser Fan and Evaporator Blower Location Diagram	Page 16	Page 16	Page 16	Page 16	Page 16

FRIGIDAIRE MODEL SPECIFICATIONS

Model	FAS256N2A	FAS256N2A2	FAS296N2A	FAS296N2A2	FAH085N1T
Chassis Type	Heavy Duty	Heavy Duty	Heavy Duty	Heavy Duty	TTW
Capacity Features					
BTU-Cooling	25000/24700	25000/24700	28500/28000	28500/28000	8000
BTU-Heating	-	-	-	-	-
Moisture Removal	7.6	7.6	8.6	8.6	1.8
EER	9.4	9.4	8.5	8.5	9.4
Electrical Information					
Voltage	230/208	230/208	230/208	230/208	115
Amps-Cooling	12.0/13.0	11.4/12.6	15.0/16.3	14.4/15.9	7.5
Amps-Heating	-	-	-	-	-
Watts-Cooling	2660/2630	2660/2630	3365/3300	3365/3300	850
Watts-Heating	-	-	-	-	-
Fuse/Breaker(Amps)	20	20	30	30	15
Receptacle Type	NEMA 6-20	NEMA 6-20	NEMA 6-30	NEMA 6-30	NEMA 5-15
Power Cord Number	309343114	309343135	309343120	309343136	309343108
Power Cord Awg Min	12	12	12	12	16
Wiring Diagram	309902101	309902101	309902101	309902101	309201101
Page #	18	18	18	18	17
Air Flow System					
Capacitor-µ farads	7.5/450	7.5/450	7.5/450	7.5/450	10/370
Fan Motor Mfg.	Heshan	Heshan	Heshan	Heshan	Welling
Fan Motor Number	309630616	309630614	309630616	309630614	309647503
RPM/CMP(EVAP)					
High	1145/590	1115/550	1145/570	1115/550	1130/280
Medium	-	-	-	-	950/230
Low	925/470	925/470	960/475	925/470	800/190
Heat Only	-	-	-	-	-
Refrigeration System					
Compressor Mfg.	LG	LG	LG	LG	Matsushita
Compressor Number	QP348KBB	QP348KBB	QP425KAA	QP425KAA	2R11S3R126A6A
Compressor Type	Rotary	Rotary	Rotary	Rotary	Rotary
Overload Protector	Internal	Internal	Internal	Internal	309260303
Capacitor-µ farads	40/450	40/450	45/450	45/450	35/370
Refrigeration Charge	40.5	40.5	41.3	41.3	18.7
Restrictor Tube	A112153	A112153	A112156/57-59	A112156/57-59	A112116
Thermostat Type	Electronic	Electronic	Electronic	Electronic	Electronic
Installation Instructions					
Kit Type	A	A	A	A	T
Part Number	309000906	309000906	309000906	309000906	309636002
Control Thermostat Location Diagram	Page 14	Page 14	Page 14	Page 14	Page 14
Condenser Fan and Evaporator Blower Location Diagram	Page 16	Page 16	Page 16	Page 16	Page 15

FRIGIDAIRE MODEL SPECIFICATIONS

Model	FAH085N1T2	FAH08EN1T	FAH08EN1T-Rev B SN:EK50800613~1224	FAH105N1T	FAH105N1T2
Chassis Type	TTW	TTW	TTW	TTW	TTW
Capacity Features					
BTU-Cooling	8000	8000	8000	10000	10000
BTU-Heating	-	4200	4200	-	-
Moisture Removal	1.8	1.8	1.8	2.8	2.8
EER	9.4	9.4	9.4	9.4	9.4
Electrical Information					
Voltage	115	115	115	115	115
Amps-Cooling	7.5	7.5	7.5	10	10
Amps-Heating	-	12	12	-	-
Watts-Cooling	850	850	850	1065	1065
Watts-Heating	-	1250	1250	-	-
Fuse/Breaker(Amps)	15	15	15	15	15
Receptacle Type	NEMA 5-15	NEMA 5-15	NEMA 5-15	NEMA 5-15	NEMA 5-15
Power Cord Number	309343127	309343125	309343129	309343108	309343131
Power Cord Awg Min	16	14	14	16	16
Wiring Diagram	309201101	309201102	309201102	309201101	309201101
Page #	17	18	18	17	17
Air Flow System					
Capacitor-µ farads	10/370	10/370	10/370	10/370	10/370
Fan Motor Mfg.	Welling	Welling	Welling	Welling	Welling
Fan Motor Number	309647503	309647503	309647503	309647503	309647503
RPM/CMP(EVAP)					
High	1130/280	1130/280	1130/280	1130/280	1130/280
Medium	950/230	950/230	950/230	950/240	950/240
Low	800/190	800/190	800/190	800/210	800/210
Heat Only	-	-	-	-	-
Refrigeration System					
Compressor Mfg.	Matsushita	Matsushita	Matsushita	LG	LG
Compressor Number	2R11S3R126A6A	2R11S3R126A6A	2R11S3R126A6A	QK141CCA	QK141CCA
Compressor Type	Rotary	Rotary	Rotary	Rotary	Rotary
Overload Protector	309260303	309260303	309260303	A363785	A363785
Capacitor-µ farads	35/370	35/370	35/370	50/370	50/370
Refrigeration Charge	18.7	18.7	18.7	20.5	20.5
Restrictor Tube	A112116	A112116	A112116	A112129	A112129
Thermostat Type	Electronic	Electronic	Electronic	Electronic	Electronic
Installation Instructions					
Kit Type	T	T	T	T	T
Part Number	309636002	309636002	309636002	309636002	309636002
Control Thermostat Location Diagram	Page 14	Page 14	Page 14	Page 14	Page 14
Condenser Fan and Evaporator Blower Location Diagram	Page 15	Page 15	Page 15	Page 15	Page 15

FRIGIDAIRE MODEL SPECIFICATIONS

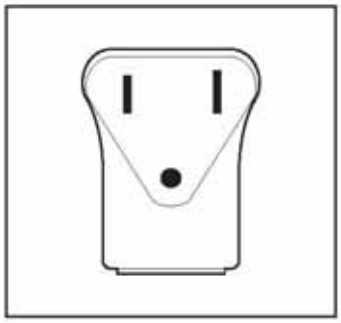
Model	FAH105N2T	FAH10EN2T	FAH124N2T	FAH125N2T	FAH125N2T2
Chassis Type	TTW	TTW	Builder line	Builder line	Builder line
Capacity Features					
BTU-Cooling	10000/9800	10000/9800	12000/11700	12000/11700	12000/11700
BTU-Heating	-	10600/8600	-	-	-
Moisture Removal	2.8	2.8	3.6	3.6	3.6
EER	9.4	9.4	9	9	9
Electrical Information					
Voltage	230/208	230/208	230/208	230/208	230/208
Amps-Cooling	4.7/5.1	4.7/5.1	5.9/6.4	5.9/6.4	5.9/6.4
Amps-Heating	-	15.5/14	-	-	-
Watts-Cooling	1060/1045	1060/1045	1335/1300	1335/1300	1335/1300
Watts-Heating	-	3450/2800	-	-	-
Fuse/Breaker(Amps)	15	20	15	15	15
Receptacle Type	NEMA 6-15	NEMA 6-20	NEMA 6-15	NEMA 6-15	NEMA 6-15
Power Cord Number	309343109	309343126	309343109	309343128	309343132
Power Cord Awg Min	18	16	18	18	18
Wiring Diagram	309201101	309201102	309201101	309201101	309201101
Page #	17	18	17	17	17
Air Flow System					
Capacitor-µ farads	6/450	6/450	7.5/450	7.5/450	7.5/450
Fan Motor Mfg.	Welling	Welling	Welling	Welling	Welling
Fan Motor Number	309647501	309647501	309647502	309647502	309647502
RPM/CMP(EVAP)					
High	1130/280	1130/280	1280/300	1280/300	1280/300
Medium	1010/240	1010/240	1130/260	1130/260	1130/260
Low	880/210	880/210	975/230	975/230	975/230
Heat Only	-	-	-	-	-
Refrigeration System					
Compressor Mfg.	LG	LG	LG	LG	LG
Compressor Number	QK141KBE	QK141KBE	QK164KBC	QK164KBC	QK164KBC
Compressor Type	Rotary	Rotary	Rotary	Rotary	Rotary
Overload Protector	A363786	A363786	A363788	A363788	A363788
Capacitor-µ farads	30/450	30/450	30/450	30/450	30/450
Refrigeration Charge	18.4	18.4	22.6	22.6	22.6
Restrictor Tube	A112145	A112145	A112119	A112119	A112119
Thermostat Type	Electronic	Electronic	Electronic	Electronic	Electronic
Installation Instructions					
Kit Type	T	T	T	T	T
Part Number	309636002	309636002	309636002	309636002	309636002
Control Thermostat Location Diagram	Page 14	Page 14	Page 14	Page 14	Page 14
Condenser Fan and Evaporator Blower Location Diagram	Page 15	Page 15	Page 15	Page 15	Page 15

FRIGIDAIRE MODEL SPECIFICATIONS

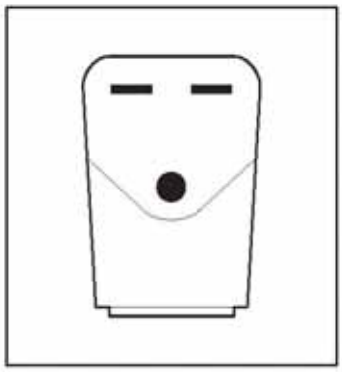
Model	FAH12EN2T	FAH12EN2T-Rev B SN:EK50800001~612	FAK083N7V	FAK103N1V	FAK123N1V
Chassis Type	TTW	TTW	Slider Casement	Slider Casement	Slider Casement
Capacity Features					
BTU-Cooling	12000/11700	12000/11700	8000	10000	12000
BTU-Heating	10600/8600	10600/8600	-	-	-
Moisture Removal	3.6	3.6	2.2	2.8	3.6
EER	9	9	10.5	9.5	9.5
Electrical Information					
Voltage	230/208	230/208	115	115	115
Amps-Cooling	5.9/6.4	5.9/6.4	6.7	9.6	11.5
Amps-Heating	15.5/14	15.5/14	-	-	-
Watts-Cooling	1335/1300	1335/1300	760	1050	1260
Watts-Heating	3450/2800	3450/2800	-	-	-
Fuse/Breaker(Amps)	20	20	15	15	15
Receptacle Type	NEMA 6-20	NEMA 6-20	NEMA 5-15	NEMA 5-15	NEMA 5-15
Power Cord Number	309343126	309343130	309343105	309343105	309343106
Power Cord Awg Min	16	16	16	16	14
Wiring Diagram	309201102	309201102	A232012	A232012	A232012
Page #	18	18	17	17	17
Air Flow System					
Capacitor-µ farads	7.5/450	7.5/450	5/370	15/370	15/370
Fan Motor Mfg.	Welling	Welling	Heshan	Heshan	Heshan
Fan Motor Number	309647502	309647502	309646002	309646001	309646001
RPM/CMP(EVAP)					
High	1280/300	1280/300	1120/240	1400/305	1400/305
Medium	1130/260	1130/260	1000/210	1230/260	1230/260
Low	975/230	975/230	940/190	1050/210	1050/210
Heat Only	-	-	-	-	-
Refrigeration System					
Compressor Mfg.	LG	LG	Matsushita	LG	LG
Compressor Number	QK164KBC	QK164KBC	2R11S3R126A6A	QK134CCA	QK164CCA
Compressor Type	Rotary	Rotary	Rotary	Rotary	Rotary
Overload Protector	A363788	A363788	309260303	A363785	A363776
Capacitor-µ farads	30/450	30/450	35/370	50/370	50/370
Refrigeration Charge	22.6	22.6	20.11	20.46	23.28
Restrictor Tube	A112119	A112119	A112124	A112137	A112104
Thermostat Type	Electronic	Electronic	Bulb	Bulb	Bulb
Installation Instructions					
Kit Type	T	T	V	V	V
Part Number	309636002	309636002	309625802	309625802	309625802
Control Thermostat Location Diagram	Page 14	Page 14	Page 14	Page 14	Page 14
Condenser Fan and Evaporator Blower Location Diagram	Page 15	Page 15	Page 15	Page 15	Page 15

Compressor Overload Data						
Part#	Used With Compressor	Supplier Part#	Opening Temp C°± 5 C°	Closing Temp C°± 11 C°	Short Time Trip at 25 C°	
					Test Amp	Opening Time-Sec
309260303	2R11S3R126A6A	MRA98705				
A363785	QK134CCA	MRA12061-12056	150	61	50.5	6-16
A363785	QK141CCA	MRA12061-12056	150	61	50.5	6-16
A363776	QK164CCA	MRA12053-12057	150	61±9 C°	41.5	6-16
A363784	QK191CAB	MRA4720-12057	150	69	50.3	2-12
A363786	QK141KBE	MRA12054-12056	155±7 C°	69	14.5	6-16
A363788	QK164KBC	MRA12124-12056	155	69	19.0	6-16
A363771	QJ258KAB	MRA12044-12057	160	61	29.0	6-16
A363789	QJ250KBA	MRA12107-12057	150	69	27.3	6-16

Receptacle Outlet Codes

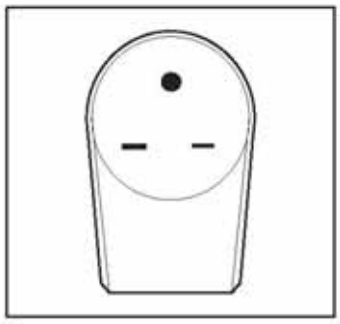


Code A
115 Volts - 15 Amps
NEMA 5 - 15 TYPE

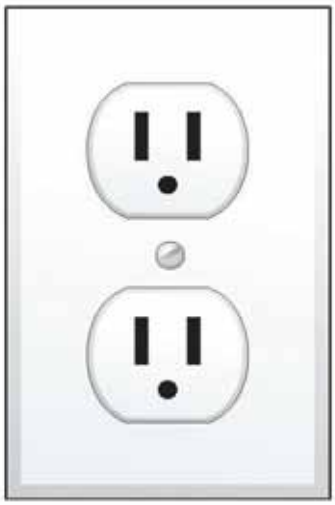


Code C
230 Volts - 15 Amps
NEMA 6 - 20 TYPE

Code D
230 Volts - 20 Amps
NEMA 6 - 20 TYPE



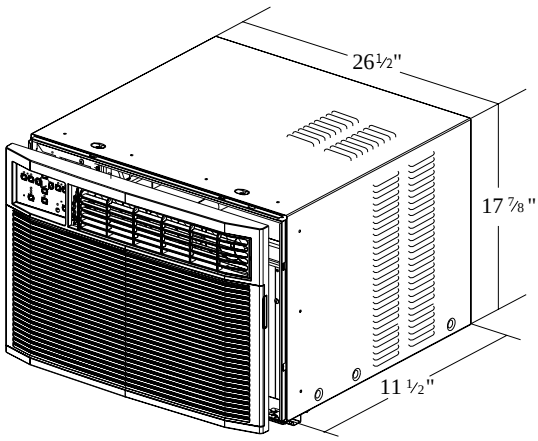
Code E
230 Volts - 30 Amps
NEMA 6 - 30 TYPE



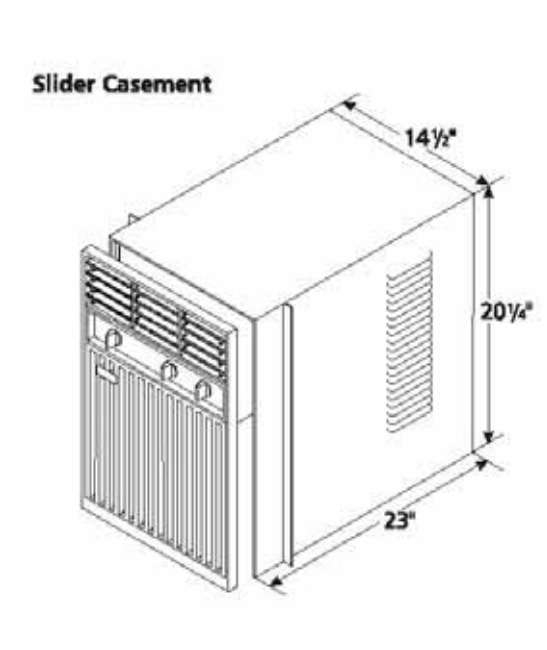
Grounding Type
Wall Receptacle

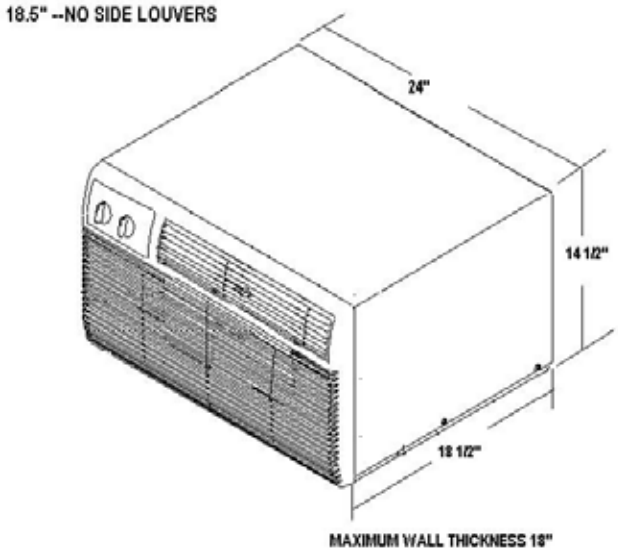
Product Dimensions

Heavy Duty



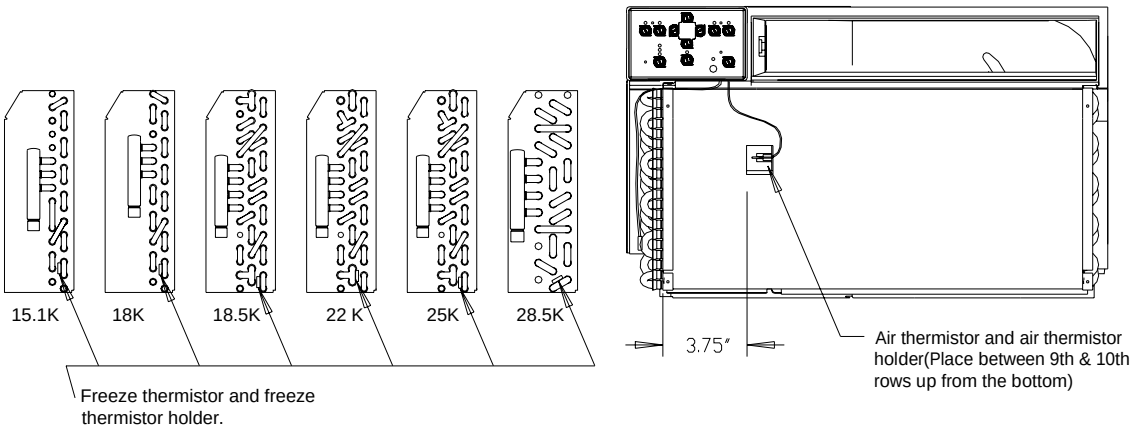
Max wall thickness 11"

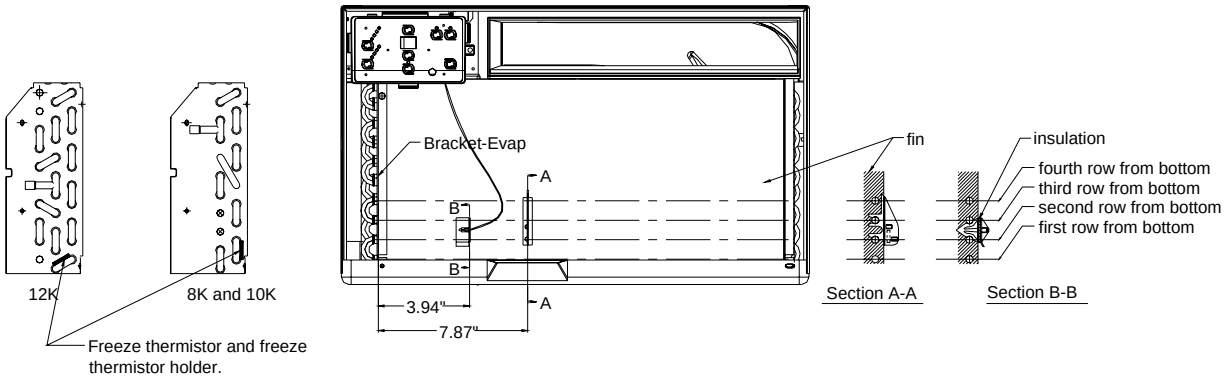


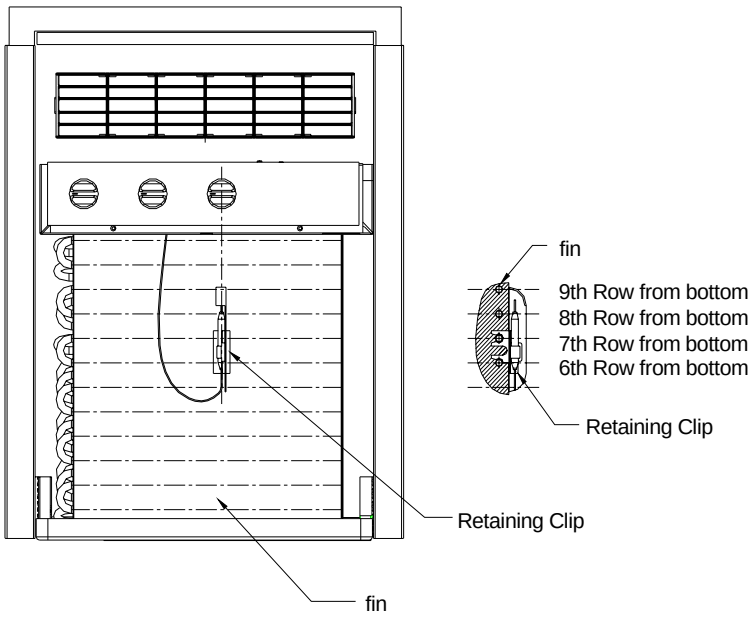


Control Thermostat Location Diagrams

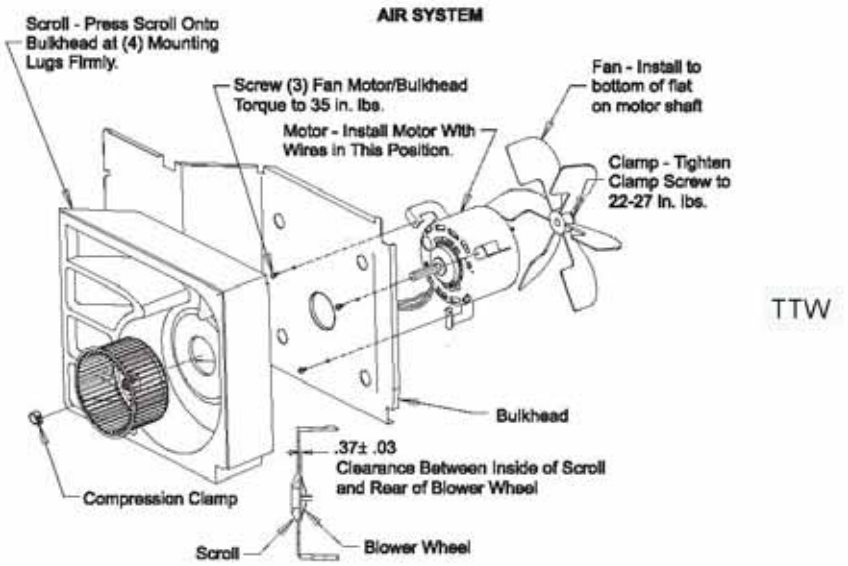
2004 Heavy Duty Thermostat Location





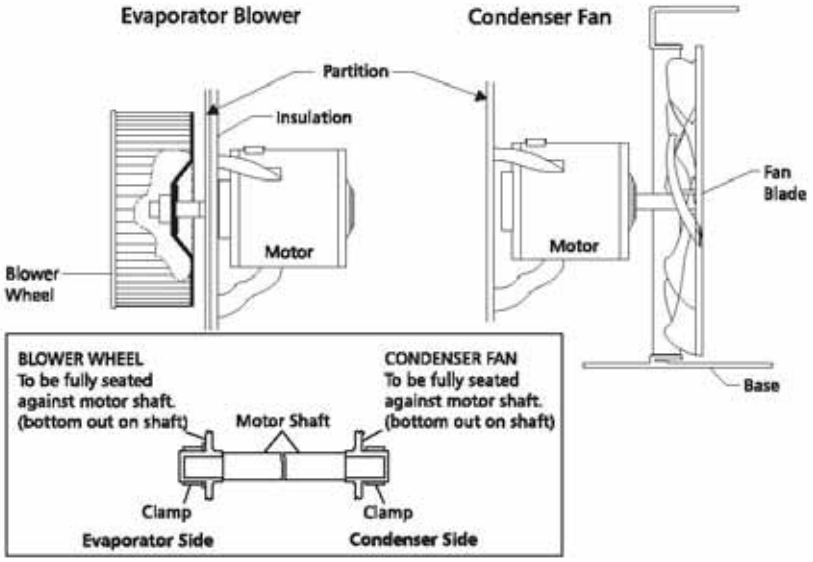


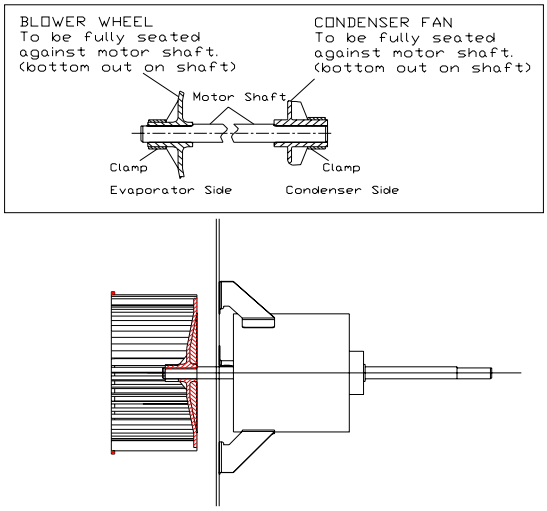
Fan and Blower Location Diagrams


AIR SYSTEM
Scroll - Press Scroll Onto Bulkhead at (4) Mounting Lugs Firmly.
Screw (3) Fan Motor/Bulkhead Torque to 35 in. lbs.
Motor - Install Motor With Wires in This Position.
Fan - Install to bottom of flat on motor shaft
Clamp - Tighten Clamp Screw to 22-27 In. lbs.
Bulkhead
.37± .03
Clearance Between Inside of Scroll and Rear of Blower Wheel
Compression Clamp
Scroll
Blower Wheel

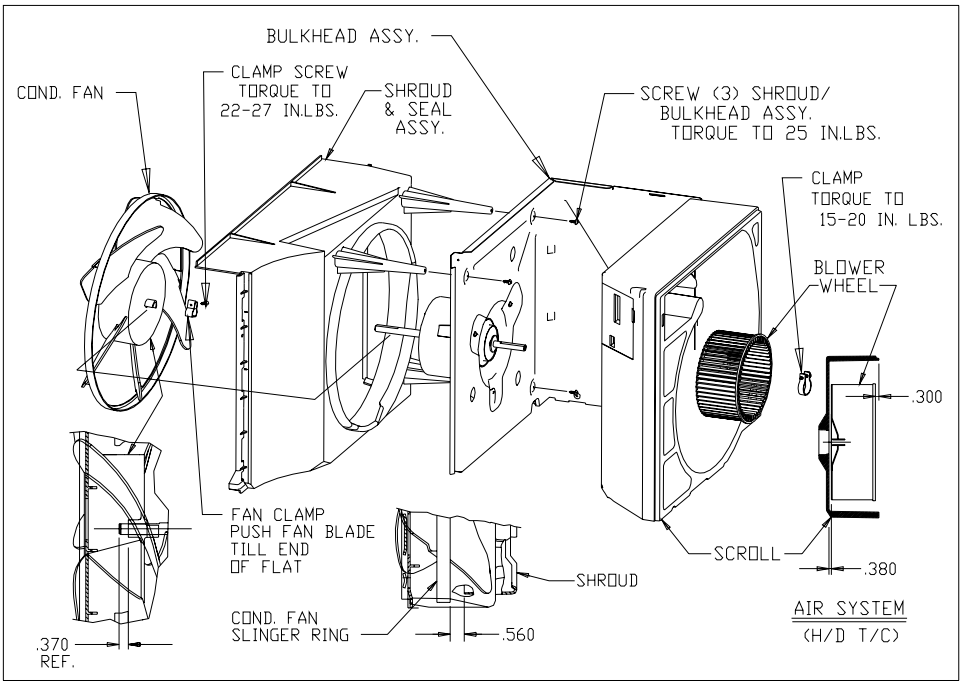
TTW

Slider Casement

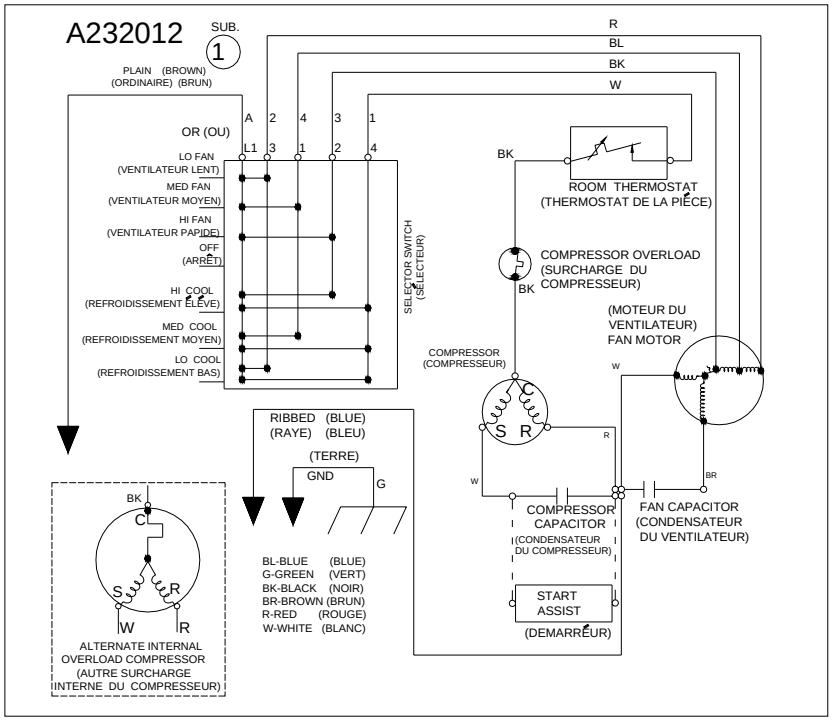


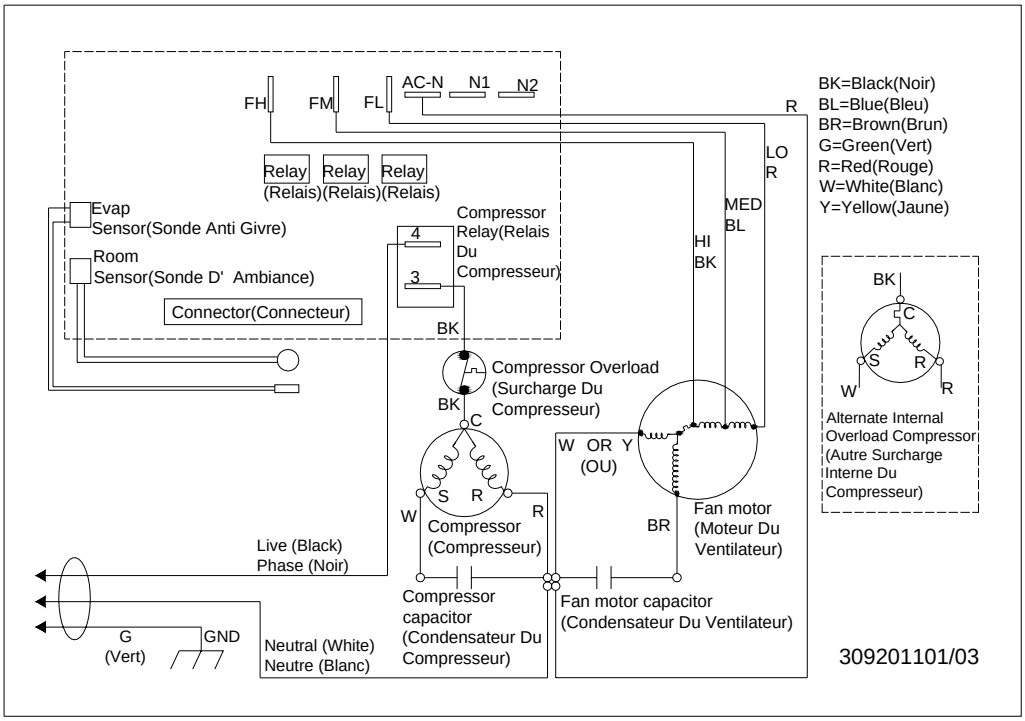


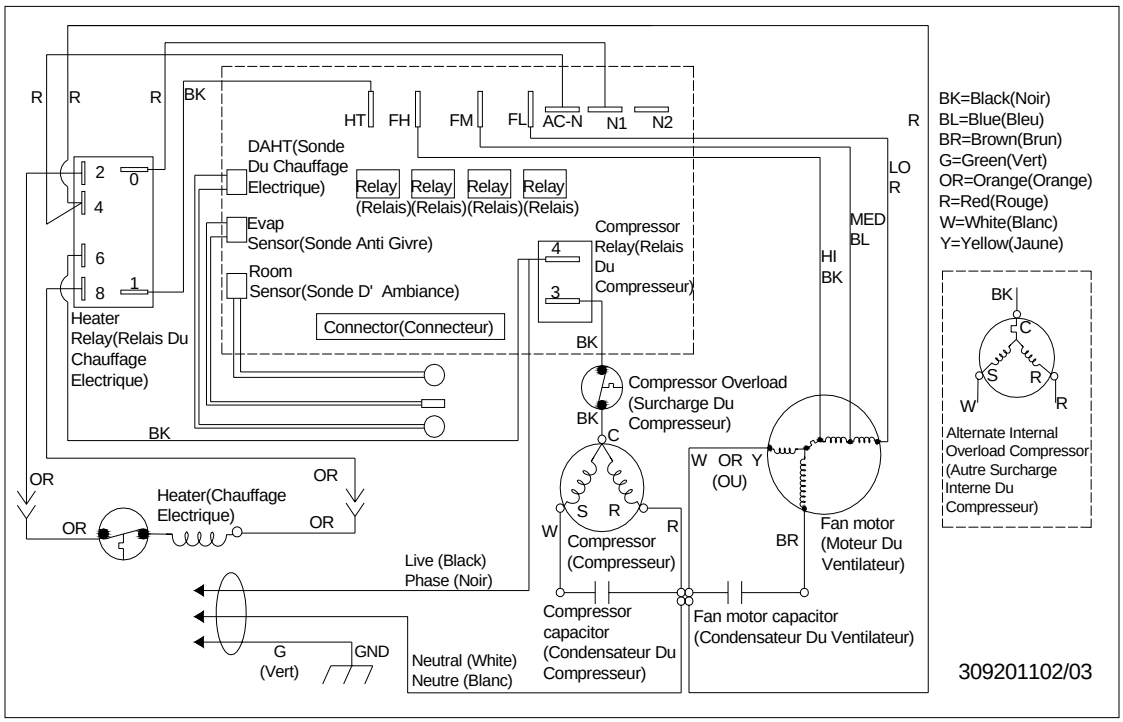
Heavy Duty
Top Control

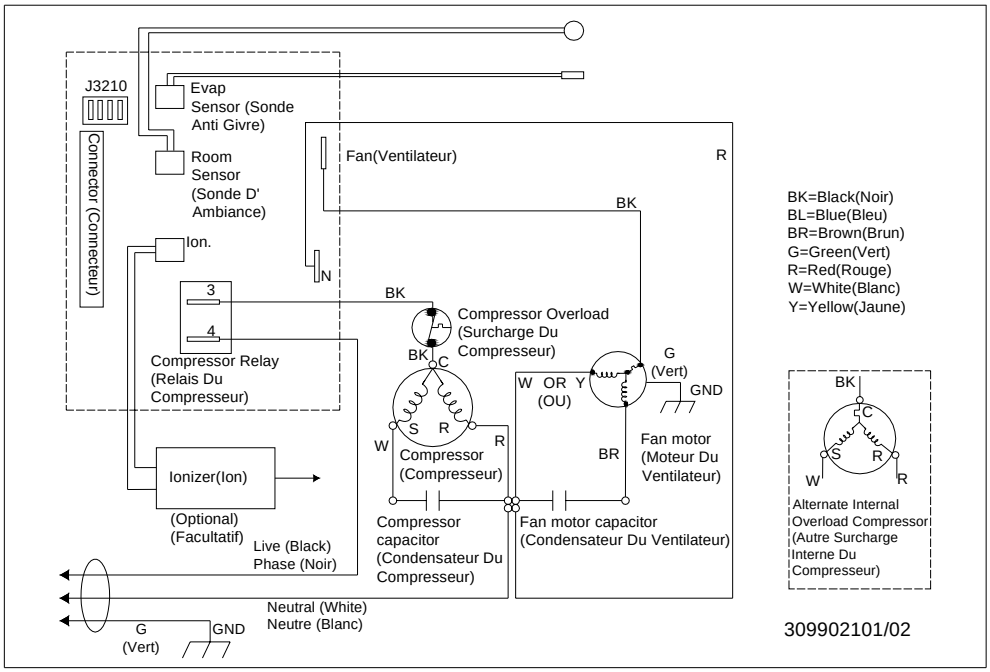


Wiring Diagrams






R
R
R
BK
HT
FH
FM
FL
AC-N
N1
N2
R
LO
R
MED
BL
HI
BK
DAHT(Sonde Du Chauffage Electrique)
Relay (Relais)
Relay (Relais)
Relay (Relais)
Relay (Relais)
Evap Sensor(Sonde Anti Givre)
Room Sensor(Sonde D' Ambiance)
Connector(Connecteur)
Compressor Relay(Relais Du Compresseur)
Heater Relay(Relais Du Chauffage Electrique)
Compressor Overload (Surcharge Du Compresseur)
Heater(Chauffage Electrique)
OR
W OR Y (OU)
Compressor (Compresseur)
Fan motor (Moteur Du Ventilateur)
Live (Black) Phase (Noir)
Compressor capacitor (Condensateur Du Compresseur)
Fan motor capacitor (Condensateur Du Ventilateur)
G (Vert)
GND
Neutral (White) Neutre (Blanc)
BK=Black(Noir)
BL=Blue(Bleu)
BR=Brown(Brun)
G=Green(Vert)
OR=Orange(Orange)
R=Red(Rouge)
W=White(Blanc)
Y=Yellow(Jaune)
Alternate Internal Overload Compressor (Autre Surcharge Interne Du Compresseur)
309201102/03


J3210
Connector (Connecteur)
Evap Sensor (Sonde Anti Givre)
Room Sensor (Sonde D' Ambiance)
Ion.
Fan(Ventilateur)
R
BK
N
Compressor Relay (Relais Du Compresseur)
Compressor Overload (Surcharge Du Compresseur)
W OR Y (OU)
G (Vert)
GND
Compressor (Compresseur)
Fan motor (Moteur Du Ventilateur)
Ionizer(Ion)
(Optional) (Facultatif)
Live (Black) Phase (Noir)
Compressor capacitor (Condensateur Du Compresseur)
Fan motor capacitor (Condensateur Du Ventilateur)
Neutral (White) Neutre (Blanc)
G (Vert)
GND
BK=Black(Noir)
BL=Blue(Bleu)
BR=Brown(Brun)
G=Green(Vert)
R=Red(Rouge)
W=White(Blanc)
Y=Yellow(Jaune)
Alternate Internal Overload Compressor (Autre Surcharge Interne Du Compresseur)
309902101/02

ROOM AIR CONDITIONERS TROUBLESHOOTING

CAUTION: Review Safe Servicing Practices in the front of this manual before attempting diagnostic procedures and repairs.

AIR CONDITIONER VOLTAGE LIMITS

NAMEPLATE RATING	MINIMUM	MAXIMUM
115 VAC	103.5 VAC	126.5 VAC
230 VAC	207 VAC	253 VAC
208/230	197.5 VAC	253 VAC

AIR CONDITIONER VOLTAGE LIMITS

Low voltage is a common cause of trouble in the operation of any room air conditioner.

Improper voltage may cause one or more of the following problems:

1. Unit will not start.
2. Compressor motor cycling on motor protector.
3. Premature failure of motor protector.
4. Blown fuses.
5. Premature failure of compressor or fan motor.
6. Noticable dimming of lights when air conditioner is running.
7. Evaporator icing. Low voltage may reduce fan speed resulting in inadequate air flow over evaporator, thereby allowing it to ice up.

Low voltage can also be the direct result of inadequately wired circuits, extension cords, or loose fuses and connections to the power supply. Voltage may also be a general condition in the area (a responsibility of the power company).

All units will start and run on the minimum voltage stated in the chart to the left, and will perform satisfactorily if the voltage remains constant. Low voltage caused by defective wiring will not remain constant under load.

To test for low voltage, use a reliable meter with sufficient capacity to measure the required voltage. Take measurements at the electric power entry point and at the electric outlet serving the air conditioner. Take readings with the unit off, while the unit is starting, and again while the unit is running. The lowest reading should not drop below the lowest value listed in the chart.

HIGH VOLTAGE

High voltage can be equally troublesome, causing motors to overheat, cycle on their protectors, or break down electrically. This problem can only be solved by the power company.

ELECTRONIC CONTROL

This control is not repairable. If any component in the control is defective, the entire control must be replaced.

IMPORTANT NOTICE: Repair or replace any malfunctioning line voltage component before testing or replacing the electronic control. **DO NOT** assume a service problem is directly caused by the electronic control system. A line voltage component (including power cord and wiring) that has opened, shorted, grounded or otherwise malfunctioned, may have created a service problem.

SYMPTON	POSSIBLE CAUSE
Fan motor will not run.	1. No power. 2. Power supply cord. 3. Selector switch. 4. Energy saving switch (if applicable). 5. Electronic control (if applicable). 6. Wire disconnected or connection loose. 7. Capacitor. (Discharge capacitor before testing.) 8. Defective fan motor windings. 9. Will not rotate. Fan blade hitting shroud or blower wheel hitting scroll. (Motor cycles on overload.)
Fan motor runs intermittently.	1. Cycle on motor protector.

SYMPTON	POSSIBLE CAUSE
Fan motor noisy.	1. Condenser fan blade or evaporator blower wheel. 2. Loose power clamp or set screw. 3. Worn bearings. 4. Grommets (if applicable).
Compressor will not run, but fan motor runs.	1. Voltage. 2. Wiring. 3. Selector switch. 4. Temperature control. 5. Capacitor. (Discharge capacitor before testing.) 6. Compressor. 7. Motor protector (external). 8. Motor protector (internal). 9. Electronic control (if applicable). 10. Hard starting.
Compressor cycles on motor protector.	1. Voltage. 2. Motor protector (external). 3. Motor protector (internal). 4. Fan motor. 5. Condenser air flow restriction. 6. Condenser fins damanged. 7. Capacitor. 8. Wiring. 9. Refrigerant system.
Insufficient cooling.	1. Low capacity. 2. Air filter. 3. Exhaust door open. 4. Unit undersized.
Excessive noise.	1. Evaporator blower wheel. 2. Condenser wheel. 3. Copper tubing. 4. Compressor internal noise. 5. Fan motor.
Excessive water or condensation.	1. Unit operating under extremely high humidity conditions.
No cooling.	1. Refrigerant leak.
Unit is cooling but room is not cool.	1. Amps and watts. 2. Sealed refrigeration system.
Wattage decreases slowly until abnormally low.	1. Undercharged, restricted strainer or plugged restrictor tube.
Wattage decreases immediately.	1. No refrigerant. 2. Compressor defective.
Wattage continuously high.	1. Refrigerant overcharge.

SYMPTON	POSSIBLE CAUSE
Evaporator coil partially frosted.	1. System low on refrigerant.
Evaporator completely iced.	1. Low outside temperature.
No heat.	1. No power. 2. Selector switch position. 3. Temperature control position. 4. Fan motor. 5. Heating element. 6. Selector switch. 7. Temperature control. 8. Terminals and connectors.
Fan motor will not rotate during heat cycle. (Heat/Cool models only.)	1. Thermostatic drain valve. (Water level control, if applicable.)